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EXAMINER
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PHAM, HUNG Q

ART UNIT	PAPER NUMBER
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2172

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8

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/829,239

Applicant(s)

KUMAGAI ET AL.

Examiner

HUNG Q PHAM

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 04 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-6, 8-15, 17-33, 35-37 and 39-52 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.

- 6) ☒ Claim(s) 1-6, 8-15, 17-33, 35-37, and 39-52 is/are rejected.

- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.

- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_. 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicants amended claims 1, 14, 30 and 36, canceled claims 7, 16, 34 and 38. Pending claims are 1-6, 8-15, 17-33, 35-37, and 39-52. Applicant's arguments with respect to claims 1-6, 8-15, 17-33, 35-37, and 39-52 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Objections***

2. Claim 8 is objected because claim 8 could only depend upon any claim from 1-6, but not claim 7. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. **Claims 30, 36, 43, 44 and 45 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.**

Regarding to claim 30, the claimed *control means controls said communication means to transmit said content ID selected by said selection means to said distribution apparatus* was not described in the specification.

Regarding to claim 36, the claimed *accounting setting means does not set said amount of said fee to be imposed on said terminal apparatus when said content ID is placed in said purchase information and said content information corresponding to said content ID stored in said second storage means is accessed by said access control means* was not described in the specification.

Regarding to claims 43-45, the claimed *logical memory map* was not described in the specification.

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein

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were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

**6. Claims 1, 8-12 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Srinivasan [USP 6,460,076 B1].**

Regarding to claim 1, Srinivasan teaches a system for downloading and recording multimedia files over a data network. As shown in FIG. 1, in connection with the server 10 is a database 12 as *a second storage means for storing* music, video, and other data, which is to be downloaded over the worldwide web 14 as *a plurality of pieces of content information*. Connected to the user interface 18 is a media-recording device 20 as *a first storage means for storing a plurality of pieces of content information* (Srinivasan, Col. 3, line 40-Col. 4, line 21). Srinivasan does not explicitly teach a *control means for accessing said content information stored in said first storage means and said second storage means based on a single set of management information for managing said content information stored in said first storage means and said second storage means; communication means for interconnecting said first storage means, said second storage means, and said control means for communication; and accounting setting means for setting an amount of a fee to be imposed on a predetermined user in accordance with a capacity of*

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*use of said second storage means by said user.* However, as shown in FIG. 2, in order for the customer to establish contact with the data network and the provider's website, a web browser 30 is installed in the user interface 18. Included in the web browser is a plugin 32. Information, which is downloaded from the worldwide web via the web browser 30 and plugin 32, is stored in this memory. Information stored in the memory 34 may be transferred to the media recorder under direction from the plugin, which includes the functionality to convert the downloaded information to a standard format for recording if the downloaded information is encrypted and/or compressed. The media recorder 36 is configured to copy information on to recordable optical disks, such as compact discs or digital video discs (Col. 4, line 41-Col. 5, line 12). The downloaded information could be a number of different types of data include software, music, movies, or other computer data (Col. 5, lines 27-33). When a new session is started, the server will generate a session ID, which is passed to the browser as a hidden field. The session ID will be stored in the server against a member ID or credit card information for later billing (Col. 5, lines 20-24). As seen, the web browser with the plugin 32 as disclosed indicates *a control means for accessing* a number of transcripts of TV programs, computer data, video games, movies, and music pre-mastered in server 10 as *content information stored in said second storage means and* the media recorder as *first storage means based on* session ID, and member ID or credit card information as *a single set of management information for managing said content information stored in said first storage means and said second storage means*. Once the session has begun, the system user is provided with a web page, which includes a number of selections for downloading

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information. Upon selection of the desired item, the web browser plug-in will confirm that the media is loaded in the recorder. If a disk is not mounted, an error message will be displayed on the user interface notifying the customer that a disk needs to be inserted into the drive. A request for downloading is established, and if accepted, the server will locate the data file in the database then begin the transmission using the file transfer protocol (Col. 5, lines 27-59). As seen, file transfer protocol for transmitting the data as discussed indicates a *communication means for interconnecting* the media recorder 20 as *said first storage means*, and the server as *said second storage means*, and the web browser as *said control means for communication*. Srinivasan further discloses the customer may be a member of a club sponsored by the service provider or just wants to record something for a fee by providing the appropriate credit card information. Access to the server will only be provided upon proper authentication or verification of credit card information (Col. 4, lines 24-29). Data for downloading also contain information related to the charges and the time it may take to record the data (Col. 4, lines 35-39). As seen, a fee imposed on a customer corresponds to the time for recording as capacity of use of the server indicates an *accounting setting means for setting an amount of a fee to be imposed on a predetermined user in accordance with a capacity of use of said second storage means by said user*. Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the Srinivasan system by including a control means for accessing information, a communication means for interconnecting the system, and an accounting setting means for imposing a fee in accordance with a capacity of use in order to remotely access and download information for recording

through a data network, to provide an automated billing process for charging customers who download information, and the necessary protections for the downloaded information to avoid unauthorized copying.

Regarding to claim 8, Srinivasan teaches all the claimed subject matters as discussed in claim 1, Srinivasan further discloses a *setting means for setting said capacity of use for said second storage means, wherein said accounting setting means sets said amount of said fee to be imposed on said user in accordance with said capacity of use of said user set by said setting means* (Col. 4, lines 35-39).

Regarding to claim 9, Srinivasan teaches all the claimed subject matters as discussed in claim 8, Srinivasan further discloses *setting means adaptively sets said capacity of use used by said user based on said management information for managing said second storage means, and said accounting setting means sets said amount of said fee to be imposed on said user in accordance with said capacity of use of said user set by said setting means* (Col. 4, lines 35-39).

Regarding to claim 10, Srinivasan teaches all the claimed subject matters as discussed in claim 1, Srinivasan further discloses *accounting setting means stores said amount of said fee to be imposed on said user in accordance with said capacity of use of said second storage means by said user in a database for each said user in said second storage means* (Col. 4, lines 35-39).



Regarding to claim 11, Srinivasan teaches all the claimed subject matters as discussed in claim 10, Srinivasan further discloses *control means controls such that said imposed amount of said fee stored for each said user in said database and a user ID of said user are transmitted to an external settlement center* (FIG. 1, Credit Authorization).

Regarding to claim 12, Srinivasan teaches all the claimed subject matters as discussed in claim 1, and further discloses *authentication means for verifying access to said second storage means by said control means* (Srinivasan, Col. 4, lines 22-40).

Regarding to claim 14, Srinivasan teaches a method for downloading and recording multimedia files over a data network. As shown in FIG. 1, in connection with the server 10 is a database 12 as *a second storage means* for storing music, video, and other data, which is to be downloaded over the worldwide web 14. Connected to the user interface 18 is a media-recording device 20 as *a first storage means* (Srinivasan, Col. 3, line 40-Col. 4, line 21). Srinivasan does not explicitly teach the method comprises the steps of *accessing content information stored in said first storage means and said second storage means based on a single set of management information for managing said content information in said first storage means and said second storage means; setting an amount of a fee to be imposed on a predetermined user in response to use of said first storage means or said second storage means in response to a capacity of use of said first storage means or said second storage means by said user*. However, as shown in FIG. 2, in order for

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the customer to establish contact with the data network and the provider's website, a web browser 30 is installed in the user interface 18. Included in the web browser is a plugin 32. Information, which is downloaded from the worldwide web via the web browser 30 and plugin 32, is stored in this memory. Information stored in the memory 34 may be transferred to the media recorder under direction from the plugin, which includes the functionality to convert the downloaded information to a standard format for recording if the downloaded information is encrypted and/or compressed. The media recorder 36 is configured to copy information on to recordable optical disks, such as compact discs or digital video discs (Col. 4, line 41-Col. 5, line 12). The downloaded information could be a number of different types of data include software, music, movies, or other computer data (Col. 5, lines 27-33). When a new session is started, the server will generate a session ID, which is passed to the browser as a hidden field. The session ID will be stored in the server against a member ID or credit card information for later billing (Col. 5, lines 20-24). As seen, the web browser with the plugin 32 as disclosed indicates a means for *accessing* a number of transcripts of TV programs, computer data, video games, movies, and music pre-mastered in server 10 as *content information stored in said second storage means and* the media recorder as *first storage means based on* session ID, and member ID or credit card information as *a single set of management information for managing said content information stored in said first storage means and said second storage means*. Srinivasan further discloses the customer may be a member of a club sponsored by the service provider or just wants to record something for a fee by providing the appropriate credit card information. Access to the server will

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only be provided upon proper authentication or verification of credit card information (Col. 4, lines 24-29). Data for downloading also contain information related to the charges and the time it may take to record the data (Col. 4, lines 35-39). As seen, a fee imposed on a customer corresponds to the time for recording as capacity of use of the server indicates the step of *setting an amount of a fee to be imposed on a predetermined user in response to use of said first storage means or said second storage means in response to a capacity of use of said first storage means or said second storage means by said user.*

Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the Srinivasan system by including the steps of accessing information, and setting means for imposing a fee in order to remotely access and download information for recording through a data network, to provide an automated billing process for charging customers who download information, and the necessary protections for the downloaded information to avoid unauthorized copying.

**7. Claims 2-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Srinivasan [USP 6,460,076 B1] in view of Parrish et al. [USP 5,117,350].**

Regarding to claim 2, Srinivasan teaches all the claimed subject matters as discussed in claim 1, but fails to disclose *control means accesses said content information stored at a predetermined physical address of each of said first storage means and said second storage means based on said single set of management information described with a logical address corresponding to said physical address.* Parrish teaches a distributed system, and

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further discloses *control means accesses said content information stored at a predetermined physical address of each of said first storage means and said second storage means based on said single set of management information described with a logical address corresponding to said physical address* (Parrish, Col. 4, line 50-Col. 5, line 25). Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the Srinivasan system by including the technique of accessing based on a logical address corresponding to said physical address in order to differentiate downloading data files by their file names.

Regarding to claim 3, Srinivasan and Parrish teaches all the claimed subject matters as discussed in claim 2, Srinivasan further discloses a *selection means for selecting at least one of said plurality of pieces of content information stored in said second storage means, wherein said control means controls so that one or more of said plurality of pieces of content information selected by said selection means may be copied or moved from said second storage means to said first storage means through said communication means* (Srinivasan, Col. 4, line 41-Col. 5, line 59).

Regarding to claim 4, Srinivasan and Parrish teaches all the claimed subject matters as discussed in claim 3, Parrish further discloses *control means searches for a logical address of said management information corresponding to said one or more of said plurality of pieces of content information selected by said selection means, converts said*

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*logical address into a physical address of said second storage means and accesses said second storage means based o said physical address* (Parrish, Col. 8, line 58-Col. 9, line 14).

8. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Srinivasan [USP 6,460,076 B1] in view of Parrish et al. [USP 5,117,350] and Omura et al. [USP 6,430,620 B1].

Regarding to claim 5, Srinivasan and Parrish teaches all the claimed subject matters as discussed in claim 3, Srinivasan further discloses an *erasure means for erasing one or more of said plurality of pieces of content information stored in said first storage means* when the file has not been successfully transferred, and *accounting setting means does not set said amount of said fee to be imposed on said user who has issued a request for said transfer* (Srinivasan, FIG. 3). However, if the file has not been successfully transferred, the process will be ended after deleting file from the memory. Omura teaches a system for locating and retransferring lost data comprises *contents ID form second storage means to first storage means* (Omura, FIG. 6 (c)-6(d), Col. 6 and Cols. 9-10). Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the Srinivasan and Parrish system by including the technique of retransferring of lost data as taught by Omura in order to compensate for the loss in case of occurrence of any data loss.

9. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Srinivasan [USP 6,460,076 B1] in view of Parrish et al. [USP 5,117,350], Omura et al. [USP 6,430,620 B1] and Kenner et al. [USP 6,154,744].

Regarding to claim 6, Srinivasan and Parrish teaches all the claimed subject matters as discussed in claim 3, Srinivasan further discloses an *erasure means for erasing one or more of said plurality of pieces of content information stored in said first storage means* when the file has not been successfully transferred. However, if the file has not been successfully transferred, the process will be ended after deleting file from the memory (Srinivasan, FIG. 3). Srinivasan and Parrish fails to teach *a contents ID of the contents information erased by said erasure means is managed with the management information, when said content information corresponding to said contents ID is again transferred from said second storage means to said first storage means by said control means said accounting setting means sets a smaller amount of said fee to be imposed on said user who has issued a request for said transfer than a normal fee*. Omura teaches a system for locating and retransferring lost data comprises *a contents ID of the contents information is managed with the management information, contents information corresponding to said contents ID is again transferred form second storage means to first storage means* (Omura, FIG. 6 (c)-6(d), Col. 6 and Cols. 9-10). Kenner teaches a system for storing and retrieving video data at distributed sites. Kenner further discloses the system allowing discounts or credits to be issued if downloads are found to be difficult or slow (Kenner, Col. 16, lines 16-27). Therefore, it would have been obvious for one of ordinary skill in

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the art at the time the invention was made to modify the Srinivasan and Parrish system by including the technique of retransferring contents information corresponding to contents ID and imposing on a user a smaller amount than a normal fee in order to compensate for the loss in case of occurrence of any data loss.

**10. Claims 13, 15, 18 and 22-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Srinivasan [USP 6,460,076 B1] in view of Wiser et al. [USP 6,385,596 B1].**

Regarding to claim 13, Srinivasan teaches all the claimed subject matters as discussed in claim 12, but fails to teach *second storage means stores a plurality of said user IDs, and said authentication means compares said user ID with which said second storage means is accessed and said plurality of said user IDs to authenticate said user who has accessed said second storage means*. Wiser teaches an online music distribution system, and further discloses *second storage means stores a plurality of said user IDs, and said authentication means compares said user ID with which said second storage means is accessed and said plurality of said user IDs to authenticate said user who has accessed said second storage means* (Wiser, Col. 11, lines 25-38 and Col. 14, lines 33-35). Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the Srinivasan system by including the technique of comparing user ID to authenticate a user in order to protect the downloaded information to avoid unauthorized copying.

Regarding to claim 15, Srinivasan teaches a system for downloading and recording multimedia files over a data network. As shown in FIG. 1, in connection with the server 10 is a database 12 as *a storage means for storing music, video, and other data*, which is to be downloaded over the worldwide web 14 as *a plurality of pieces of content information* (Srinivasan, Col. 3, line 40-Col. 4, line 21). The Srinivasan using FTP for transmitting files between the server and customer (Col. 5, lines 27-59) as a *communication means for connecting said distribution apparatus for communication to an external apparatus*. Srinivasan does not explicitly teach an *accounting setting means for setting an amount of a fee to be imposed on a user who requests use of said storage means from said external apparatus in response to a capacity of use of said storage means by said user; and control means for accessing said contents information stored in said storage means based on management information for managing said contents information stored in said storage means in response to a user request by a user from said external apparatus, wherein said control means produces management information for each said user in response to access to said content information in accordance with said user request and stores said produced management information into said storage means, said management information including at least an ID of said user stored in said storage means*. Srinivasan fails to teach the management information including *an address representative of a storage location of said content information*. However, as disclosed by Srinivasan, a customer may be a member of a club sponsored by the service provider or just wants to record something for a fee by providing the appropriate credit card information. Access to the server will only be



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provided upon proper authentication or verification of credit card information (Srinivasan, Col. 4, lines 24-29). Data for downloading also contain information related to the charges and the time it may take to record the data (Srinivasan, Col. 4, lines 35-40). The fee is charged per record (Srinivasan, Col. 3, lines 40-41). As seen, a fee imposed on a customer corresponds to the time for recording as capacity of use of the server indicates an *accounting setting means for setting an amount of a fee to be imposed on a user who requests use of said storage means from said external apparatus in response to a capacity of use of said storage means by said user*. As shown in FIG. 2, in order for the customer to establish contact with the data network and the provider's website, a web browser 30 is installed in the user interface 18. Included in the web browser is a plugin 32. Information, which is downloaded from the worldwide web via the web browser 30 and plugin 32, is stored in this memory. Information stored in the memory 34 may be transferred to the media recorder under direction from the plugin, which includes the functionality to convert the downloaded information to a standard format for recording if the downloaded information is encrypted and/or compressed. The media recorder 36 is configured to copy information on to recordable optical disks, such as compact discs or digital video discs (Col. 4, line 41-Col. 5, line 12). The downloaded information could be a number of different types of data include software, music, movies, or other computer data (Col. 5, lines 27-33). When a new session is started, the server will generate a session ID, which is passed to the browser as a hidden field. The session ID will be stored in the server against a member ID or credit card information for later billing (Col. 5, lines 20-24). As seen, the web browser with the plugin 32 as disclosed indicates a

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*control means for accessing* a number of transcripts of TV programs, computer data, video games, movies, and music pre-mastered in server 10 as *content information stored in said storage means based on* session ID, and member ID or credit card information as *management information for managing said content information stored in said storage means in response to a user request by a user from said external apparatus, wherein said control means produces management information for each said user in response to access to said content information in accordance with said user request and stores said produced management information into said storage means, said management information including at least an ID of said user stored in said storage means.* Wiser teaches a secure online music distribution system that provides consumers with flexibility and ease of use in the selection, previewing, downloading, and transporting of audio and other digital media over the Internet, and that provides for security of the media throughout the distribution system. Wiser further discloses a media voucher 300 includes a delivery server address 308 is the IP address and TCP port of a delivery server 118 that will provide the media data file 200 to the user's media player 116 and other information (Wiser, Col. 8, lines 27-41). The IP address and TCP port of a delivery server indicates *an address representative of a storage location of said content information.* Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the Srinivasan system by using a control means for accessing information, and an accounting setting means for imposing a fee in accordance with a capacity of use, and including the address representative of a storage location in order to remotely access and download information for recording through a data network, to provide an

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automated billing process for charging customers who download information, and the necessary protections for the downloaded information to avoid unauthorized copying.

Regarding to claim 18, Srinivasan and Wiser teaches all the claimed subject matters as discussed in claim 15, Srinivasan further discloses *one or more of said plurality of pieces of said content information selected by said user by using said external apparatus may be copied or moved from said storage means to said external apparatus through said communication means* (Srinivasan, Col. 5, lines 13-59).

Regarding to claim 22, Srinivasan and Wiser teaches all the claimed subject matters as discussed in claim 15, Wiser further discloses *accounting setting means sets said amount of said fee to be imposed on said user in accordance with a capacity of use of said storage means by said user* (Srinivasan, Col. 4, lines 35-39).

Regarding to claim 23, Srinivasan and Wiser teaches all the claimed subject matters as discussed in claim 22, Srinivasan further discloses *setting means for setting said capacity of use for said storage means, wherein said accounting setting means sets said amount of said fee to be imposed on said user in accordance with said capacity of use of said user set by said setting means* (Srinivasan, Col. 4, lines 35-39).

Regarding to claim 24, Srinivasan and Wiser teaches all the claimed subject matters as discussed in claim 23, Srinivasan further discloses *setting means adaptively*

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*sets said capacity of use used by said user based on said management information for managing said storage means, and said accounting setting means sets said amount of said fee to be imposed on said user in accordance with said capacity of use of said user set by said setting means* (Srinivasan, Col. 4, lines 35-39).

Regarding to claim 25, Srinivasan and Wiser teaches all the claimed subject matters as discussed in claim 22, Srinivasan further discloses *accounting setting means stores said amount of said fee to be imposed on said user in accordance with said capacity of use of said storage means by said user in a database for each said user in said storage means* (Srinivasan, Col. 4, lines 35-39).

Regarding to claim 26, Srinivasan and Wiser teaches all the claimed subject matters as discussed in claim 25, Srinivasan further discloses *control means controls such than said imposed amount of said fee stored for each said user in said database and an ID of said user are transmitted to an external settlement center* (Srinivasan, Col. 4, lines 35-39).

Regarding to claim 27, Srinivasan and Wiser teaches all the claimed subject matters as discussed in claim 15, Wiser further discloses *authentication means for verifying an access to said storage means by said control means* (Wiser, Col. 13, line 64-Col. 14, line 12).

Regarding to claim 28, Srinivasan and Wiser teaches all the claimed subject matters as discussed in claim 27, Wiser further discloses *storage means stores a plurality of user IDs, and said authentication means compares said user IDs with which said storage means is accessed and said plurality of user IDs to authenticate said user who has accessed said storage means* (Wiser, Col. 11, lines 25-38 and Col. 14, lines 33-35).

**11. Claims 17 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Srinivasan [USP 6,460,076 B1] in view of Wiser et al. [USP 6,385,596 B1] and Parrish et al. [USP 5,117,350].**

Regarding to claim 17, Srinivasan and Wiser teaches all the claimed subject matters as discussed in claim 15 but fails to disclose *control means accesses said content information stored at a predetermined physical address of each of said first storage means and said second storage means based on said single set of management information described with a logical address corresponding to said physical address*. Parrish teaches a distributed system, and further discloses *control means accesses said content information stored at a predetermined physical address of each of said first storage means and said second storage means based on said single set of management information described with a logical address corresponding to said physical address* (Parrish, Col. 4, line 50-Col. 5, line 25). Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the Srinivasan/Wiser system by including the technique of

accessing based on a logical address corresponding to said physical address in order to differentiate downloading data files by their file names.

Regarding to claim 19, Srinivasan and Wiser teaches all the claimed subject matters as discussed in claim 18, but fails to disclose *control means searches for a logical address of said management information corresponding to said one or more of said plurality of pieces of content information selected by said selection means, converts said logical address into a physical address of said second storage means and accesses said second storage means based o said physical address*. Parrish teaches a distributed system, and further discloses *control means searches for a logical address of said management information corresponding to said one or more of said plurality of pieces of content information selected by said selection means, converts said logical address into a physical address of said second storage means and accesses said second storage means based o said physical address* (Parrish, Col. 8, line 58-Col. 9, line 14). Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the Srinivasan/Wiser system by including the technique of converting a logical address to physical address in order to differentiate downloading data files by their file names.

**12. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Srinivasan [USP 6,460,076 B1] in view of Wiser et al. [USP 6,385,596 B1] and Omura et al. [USP 6,430,620 B1].**

Regarding to claim 20, Srinivasan and Wiser teaches all the claimed subject matters as discussed in claim 18, Srinivasan further discloses an *erasure means for erasing one or more of said plurality of pieces of content information stored in said first storage means* when the file has not been successfully transferred, and *accounting setting means does not set said amount of said fee to be imposed on said user who has issued a request for said transfer* (Srinivasan, FIG. 3). However, if the file has not been successfully transferred, the process will be ended after deleting file from the memory. Omura teaches a system for locating and retransferring lost data comprises *contents ID form second storage means to first storage means* (Omura, FIG. 6 (c)-6(d), Col. 6 and Cols. 9-10). Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the Srinivasan/Wiser system by including the technique of retransferring of lost data as taught by Omura in order to compensate for the loss in case of occurrence of any data loss.

**13. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Srinivasan [USP 6,460,076 B1] in view of Wiser et al. [USP 6,385,596 B1], Omura et al. [USP 6,430,620 B1], and Kenner et al. [USP 6,154,744].**

Regarding to claim 21, Srinivasan, Wiser teaches all the claimed subject matters as discussed in claim 18, Srinivasan further discloses an *erasure means for erasing one or more of said plurality of pieces of content information stored in said first storage means* when the file has not been successfully transferred. However, if the file has not been

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successfully transferred, the process will be ended after deleting file from the memory (Srinivasan, FIG. 3). Omura teaches a system for locating and retransferring lost data comprises *a contents ID of the contents information is managed with the management information, contents information corresponding to said contents ID is again transferred from second storage means to first storage means* (Omura, FIG. 6 (c)-6(d), Col. 6 and Cols. 9-10). Kenner teaches a system for storing and retrieving video data at distributed sites. Kenner further discloses the system allowing discounts or credits to be issued if downloads are found to be difficult or slow (Kenner, Col. 16, lines 16-27). Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the Srinivasan/Wiser system by including the technique of retransferring contents information corresponding to contents ID and imposing on a user a smaller amount than a normal fee as taught by Omura, and Kenner in order to compensate for the loss in case of occurrence of any data loss.

**14. Claims 29-30, 35-37, 39-46 and 49-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wiser et al. [USP 6,385,596 B1].**

Regarding to claim 29, Wiser teaches a secure online music distribution method that provides consumers with flexibility and ease of use in the selection, previewing, downloading, and transporting of audio and other digital media over the Internet, and that provides for security of the media throughout the distribution system. As shown in FIG. 1 is a system for the secure distribution of music and related media over the



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Internet. The system includes a music distribution center 124, which operates with any number of client systems 126. The music distribution center 124 includes a content manager 112, which maintains a media information database 106, a master media file system 120, and a transaction database 130. As shown in FIG. 2, is an illustration of a media data file. The media data files 200 as *content information are stored in* the master media file system 120 as *storage means* (Col. 5, line 43-Col. 7, line 16). Wiser does not explicitly teach the steps of *accessing said content information stored in storage means based on management information for managing said content information stored in said storage means in response to said user request from an external apparatus; producing management information for each said user in response to said access to said content information; and transmitting said accessed content information to said external apparatus, wherein said management information includes an ID of said user and an address representative of a storage location of said information stored in said storage means.*

However, as taught by Wiser, after the process of registration as shown in FIG. 6, a user is authorized to purchase and preview music from the system. As shown in FIGS. 9a and 9b is the process 900 of purchasing a media data file 200 for persistent storage and playback by a user's media player 116. First, the user will be viewing in the Web browser 128 some form of menu, catalogue, index or other listing of music and media available for purchase as in FIG. 8. From the user's Web browser 128 a purchase request for a specific song is sent 902 to the HTTP server 122, for example by the user clicking on a "Buy It" button. The content manager 112 looks up the received media ID in the media information database 106 to confirm 918 that the requested song exists

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and is available for purchase (Col. 16, line 26-Col. 17, line 54). For each purchase or preview of a media data file 200, a new media voucher is created by the content manager 112 and provided to the media player 116 of the user. The media voucher is used by the media player 116 to identify both the specific media data file 200 to be acquired and the delivery server 118 to provide the information. As shown in FIG. 3, a media voucher 300 includes a delivery server address 308 is the IP address and TCP port of a delivery server 118 that will provide the media data file 200 to the user's media player 116 and other information. The passport is a data object that provides the security information particular to each user of the system. Each user is issued a passport by the media-licensing center 110 during the registration process. As shown in FIG. 4, each passport includes a consumer certificate 402, a consumer private key 412, encrypted personal information 414, and a registration key 420 (Col. 8, line 19-Col. 9, line 37). As seen, media ID is *management information for managing contents information*, and registration key, consumer certificate, consumer private key, encrypted personal information is *management information for each user in response to access to content information*. The media data files as *contents information stored in storage means* is accessed by the web browser for previewing or purchasing *based on* media ID as *management information for managing contents information stored in storage means in response to said user request from external apparatus*. A new media voucher and passport that contains registration key, consumer certificate, consumer private key, encrypted personal information as *management information for each said user in response to said access to said content information* is produced, wherein said management information

*including a registration key as an ID of said user and the IP address and TCP port of a delivery server as an address representative of a storage location of said information stored in said storage means.* In other words, the technique as discussed indicates the steps of *accessing said content information stored in storage means based on management information for managing said content information stored in said storage means in response to said user request from an external apparatus; producing management information for each said user in response to said access to said content information, wherein said management information includes an ID of said user and an address representative of a storage location of said information stored in said storage means.* As shown in FIG. 9BA and 9BB is the process indicates the step of *transmitting said accessed content information to said external apparatus* (Col. 16-20). Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the Wiser method by including the technique of accessing contents information based on management information in order to remotely access and transmitting content information for recording through a data network, to provide an automated billing process for charging customers who download information, and the necessary protections for the downloaded information to avoid unauthorized copying.

Regarding to claim 30, Wiser teaches a secure online music distribution system that provides consumers with flexibility and ease of use in the selection, previewing, downloading, and transporting of audio and other digital media over the Internet, and that provides for security of the media throughout the distribution system. As shown in

FIG. 2 is a client system has two basic components, a media player and a web browser. The media player is the mechanism by which the consumer digitally records purchased media data files to a further external memory, such as a CD-Recordable, CD-RW, Mini-Disc, flash memory. The media player provides user interface controls for viewing lists of purchased and stored media data files as *a plurality of pieces of said content information* (Col. 10, lines 1-13). In other word, media player is a *storage means for storing a plurality of pieces of said content information*. Wiser does not explicitly teach *communication means for receiving a plurality of content IDs stored in said distribution apparatus from said distribution apparatus and transmitting at least one said content ID to said distribution apparatus in response to a user request; selection means for selecting one content ID of said plurality of content IDs received by said communication means; and control means for controlling said communication means to transmit said at least one content ID to said distribution apparatus in response to said user request and storing addresses corresponding to said content IDs received from said distribution apparatus into said storage means, wherein said control means controls said communication means to transmit said addresses stored in said storage means to said distribution apparatus when said terminal apparatus requests said content information corresponding to said content ID from said distribution apparatus; and said control means controls said communication means to transmit said content ID selected by said selection means to said distribution apparatus*. However, as shown in FIG. 8 is an example of web page for selecting a preview or purchase. Previewing begins with the user viewing a Web page in the Web browser that has a link to a preview of a desired media data file. The Web browser invokes the HTTP

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server with a request for a preview of a media data file when clicked (Col. 14, lines 40-47). As seen, by using HTTP to communicate between the client system and the music distribution center 124, a web page contains a list of song titles as content IDs is received at the client system by utilizing the web browser. The user could select a song title for previewing or purchasing via the web browser. The request of previewing or purchasing is transmitted to the music distribution center 124 by using a link to invoke the HTTP server for transferring the request. In other words, the technique of using HTTP server as discussed indicates *a communication means for receiving a plurality of song titles as content IDs stored in and from the music distribution center 124 as distribution apparatus, and transmitting a song title as at least one said content ID when selected to said distribution apparatus in response to a user request, and the web browser as selection means for selecting one content ID of said plurality of content IDs received by said communication means*. As shown in FIG. 6, when the media player starts up, it checks for the existence of the user's passport. If the passport does not exist, the media player will launch the Web browser, providing it a URL to a registration page of the media licensing center to create a passport. If the passport exists, the media player then validates the passport for authentication. Once the passport is validated, the media player authorizes the user to purchase and preview music from the system (Col. 13, line 4-Col. 14, line 21). The requested media data file specified by media ID and transmitted by HTTP server is validated by the content manager 112 to determine whether the file is available or not. If the file is not present, the content manager returns an error. If the existence of the file is confirmed, the content manager determines whether a delivery

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server is available to handle the request (Col. 14, lines 48-64). If a delivery server is available, the content manager 112 generates and returns to the HTTP server a media voucher, which includes the network address of the delivery server and port number, voucher ID, and media ID. The HTTP server generates and returns to the Web browser an HTTP response embedding the media voucher data. The Web browser receives the HTTP response and stores the data of the media voucher in a local file. The Web browser then passes the file name of this file to the media player (Col. 15, lines 19-32). The delivery server has a module for handling requests from Web browser to preview or purchase media data files. A request is sent, depending on the type of request, as encoded in the URL passed to the HTTP server 122. This module provides a DS Register function, registers the network address of the delivery server with the content manager 112 (Col. 23, lines 40-57). If the user makes a purchase request for a specific song by clicking on a "Buy It" button. The button generates a URL including the media ID of the song to be purchased. For example, an invocation of the HTTP server 122 may look like: `https://web-server-addr/cgi-bin/purchase? mid=MID` where web-server-addr is the hostname or IP address and TCP port of the HTTP/SSL server and MID is the media ID (Col. 16, lines 26-43). As seen, before the HTTP process of transmitting a selected media data file for purchasing or previewing specified by a media ID, the process is controlled by the process of passport validating. The address of delivery server that corresponds to a media file is sent to the client site and stored at the media player; it then retrieved and sent back to the music distribution center 124 for a purchasing or previewing. The URL as network address of the delivery server was

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registered with the content manager. Otherwise, the URL is an invalid address. In short, the technique as discussed performed the claimed *control means for controlling said communication means to transmit said at least one content ID to said distribution apparatus in response to said user request and storing addresses corresponding to said content IDs received from said distribution apparatus into said storage means, wherein said control means controls said communication means to transmit said addresses stored in said storage means to said distribution apparatus when said terminal apparatus requests said content information corresponding to said content ID from said distribution apparatus; and said control means controls said communication means to transmit said content ID selected by said selection means to said distribution apparatus*. Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the Wiser system by including the communication means, selection means, and control means in order to remotely access and download information for recording through a data network, to provide an automated billing process for charging customers who download information, and the necessary protections for the downloaded information to avoid unauthorized copying.

Regarding to claim 35, Wiser teaches a secure online music distribution method that provides consumers with flexibility and ease of use in the selection, previewing, downloading, and transporting of audio and other digital media over the Internet, and that provides for security of the media throughout the distribution system. As shown in FIG. 1 is a system for the secure distribution of music and related media over the

Internet. The system includes a music distribution center 124, which operates with any number of client systems 126. The music distribution center 124 includes a content manager 112, which maintains a media information database 106, a master media file system 120, and a transaction database 130. As shown in FIG. 2 is a client system has two basic components, a media player and a web browser. The media player is the mechanism by which the consumer digitally records purchased media data files to a further external memory, such as a CD-Recordable, CD-RW, Mini-Disc, flash memory. The media player provides user interface controls for viewing lists of purchased and stored media data files as *a plurality of pieces of said content information* (Col. 10, lines 1-13). In other word, media player is a *storage means for storing a plurality of pieces of said content information*. Wiser does not explicitly teach the steps of *receiving a plurality of content IDs stored in said distribution apparatus from said distribution apparatus; transmitting one or more content IDs to said distribution apparatus in response to a user request; storing addresses corresponding to said one or more content IDs received from said distribution apparatus into storage means, transmitting said addresses stored in said storage means to said distribution apparatus when a request to re-send said content information corresponding to any of said content ID*. However, as shown in FIG. 8 is an example of web page for selecting a preview or purchase. Previewing begins with the user viewing a Web page in the Web browser that has a link to a preview of a desired media data file. The Web browser invokes the HTTP server with a request for a preview of a media data file when clicked (Col. 14, lines 40-47). As seen, by using HTTP to communicate between the client system and the music distribution center 124 as *a distribution*



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*apparatus*, a web page contains a list of song titles as content IDs is received at the client system by utilizing the web browser as the step of *receiving a plurality of content IDs stored in said distribution apparatus from said distribution apparatus*. The user could select a song title for previewing or purchasing via the web browser. The request of previewing or purchasing is transmitted to the music distribution center 124 by using a link to invoke the HTTP server for transferring the request. In other words, the technique of using HTTP for transferring a requested media file represented by title indicates the step of *transmitting one or more content IDs to said distribution apparatus in response to a user request*. The requested media data file specified by media ID and transmitted by HTTP server is validated by the content manager 112 to determine whether the file is available or not. If the file is not present, the content manager returns an error. If the existence of the file is confirmed, the content manager determines whether a delivery server is available to handle the request (Col. 14, lines 48-64). If a delivery server is available, the content manager 112 generates and returns to the HTTP server a media voucher, which includes the network address of the delivery server and port number, voucher ID, and media ID. The HTTP server generates and returns to the Web browser an HTTP response embedding the media voucher data. The Web browser receives the HTTP response and stores the data of the media voucher in a local file. The Web browser then passes the file name of this file to the media player (Col. 15, lines 19-32). As seen, the address of a delivery server that corresponds to a media ID is sent to the client site and stored at the media player as the step of *storing addresses corresponding to said one or more content IDs received from said distribution apparatus into storage means*. If

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the user makes a purchase request for a specific song by clicking on a "Buy It" button. The button generates a URL including the media ID of the song to be purchased. For example, an invocation of the HTTP server 122 may look like: <https://web-server-addr/cgi-bin/purchase?mid=MID> where web-server-addr is the hostname or IP address and TCP port of the HTTP/SSL server and MID is the media ID (Col. 16, lines 26-43). As seen, the address of delivery server that corresponds to a media file is sent to the client site and stored at the media player; it then retrieved and sent back to the music distribution center 124 for a purchasing. Thus, in a real life scenario, a user could select a song for previewing and then purchase the song by clicking the buy it button. The address of a delivery server is sent to the music distribution center 124 for previewing, and re-sent for purchasing as a request. As seen, the technique of sending the address of the delivery server for purchasing after previewing as discussed indicates the step of *transmitting said address stored in said storage means to said distribution apparatus when a request to re-send said content information corresponding to any of said contents IDs is issued*. Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the Wiser system by including the technique of receiving and re-transmitting contents information in order to remotely access and download information for recording through a data network, to provide an automated billing process for charging customers who download information, and to compensate for the loss in case of occurrence of any data loss.

Regarding to claim 36, Wiser teaches a secure online music distribution system that provides consumers with flexibility and ease of use in the selection, previewing, downloading, and transporting of audio and other digital media over the Internet, and that provides for security of the media throughout the distribution system. As shown in FIG. 1 is a system for the secure distribution of music and related media over the Internet. The system includes a music distribution center 124 as *a distribution apparatus*, which operates with any number of client systems 126 as *a terminal apparatus*. The music distribution center 124 includes a content manager 112, which maintains a media information database 106, a master media file 120, and a transaction database 130. As shown in FIG. 2, is an illustration of a media data file. The media data files 200 as *a plurality of pieces of content information are stored in* the master media file 120 as *second storage means* (Col. 5, lines 43-65). FIG. 2 is a client system has two basic components, a media player and a web browser. The media player is the mechanism by which the consumer digitally records purchased media data files to a further external memory, such as a CD-Recordable, CD-RW, Mini-Disc, flash memory. The media player provides user interface controls for viewing lists of purchased and stored media data files as *a plurality of pieces of said content information* (Col. 10, lines 1-13). In other word, a client system as a terminal apparatus that has media player as a *first storage means for storing a plurality of pieces of said content information*. Wiser does not explicitly teach *communication means for interconnecting said terminal apparatus and said distribution apparatus; storage control means for placing a content ID stored in said second storage means into purchase information managed for each said terminal apparatus and stored in*

*said second storage means in response to a request from said terminal apparatus; access control means for controlling access to said contents information corresponding to said content ID stored in said second storage means in response to said purchase information; accounting setting means for setting an amount of a fee to be imposed on said terminal apparatus in response to said purchase information, wherein said accounting setting means does not set said amount of said fee to be imposed on said terminal apparatus when said content ID is placed in said purchase information and said content information corresponding to said content ID stored in said second storage means is accessed by said access control means.* However, as disclosed by Wiser, the music distribution system 124 communicates with the various other components such as the client systems 126 over a public communication network, preferably the Internet, using conventional TCP-IP communication protocols for insecure channels, and a secure protocol over TCP, such as Netscape Communication Inc.'s Secure Sockets Layer v. 3 (SSL), for secure communications as *communication means for interconnecting said terminal apparatus and said distribution apparatus* (Col. 5, line 43-Col. 7, line 16). As shown in FIG. 9a-b is the process of purchasing a media data file. By clicking the buy it button, the button generates a URL including the media ID of the song to be purchased. The HTTP server forwards the purchase request to merchant server. Payment information is collected by the merchant server and the media ID is sent to the content manager 112 for verifying the availability status of the request media file (Col. 16, line 26-Col. 17, line 5). The content manager generates a media voucher that includes the media ID (Col. 15, lines 19-23). The content manager updates the transaction database to include a new entry

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with the data from the voucher (Col. 17, lines 35-37). As seen, the transaction database is in the second storage means, the verified media ID, or the content ID stored in second storage means, is placed in the transaction database as purchase information manage for each terminal apparatus. In short, the technique as discussed indicates *storage control means for placing a content ID stored in said second storage means into purchase information managed for each said terminal apparatus and stored in said second storage means in response to a request from said terminal apparatus*. The media voucher includes a receipt token, which is returned in the media voucher to the media player for initiating download of the requested media data file from a delivery server (Col. 17, lines 22-31). A receipt token is a strong random number generated by the content manager 112 which is used to create a message authentication code (MAC) of the voucher ID and consumer certificate to bind the delivery of the media data to the purchase transaction. Preferably, the MAC is a keyed message authentication code as defined in Internet RFC 2104 (Col. 8, lines 32-41). As seen, the media voucher with a receipt token is access control means for controlling access to the media data file corresponding to media ID stored in storage means in response to a purchasing. In other words, the technique as discussed indicates *access control means for controlling access to said contents information corresponding to said content ID stored in said second storage means in response to said purchase information*. When a voucher packet is issued for a reservation, it is added to the list of pending purchases, which are not yet authorized for delivery. An electronic wallet is used to provide the payment data by generating a Web page with a "Wallet" button and a "Retrieve It" button. When the user

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clicks on the wallet button, an invoice indicating the amount of the purchase is returned, and displaying to the user a set of selections of different payment forms available to the user, such as electronic cash, check or specific credit card for selection. The consumer clicks a 'Pay' button to consummate the transaction (Col. 17, line 53-Col. 18, line 5).

The authorization token is updated to reflect that the voucher packet has been authorized of purchase and download. This technique illustrates *accounting setting means for setting an amount of a fee to be imposed on said terminal apparatus in response to said purchase information*, and obviously, there will be no amount of fee to be imposed on a user although the content ID is placed in purchase information because the purchase is still pending and content information corresponding to content ID stored in second storage means is accessed by said access control means because the media voucher also utilized to preview a media file (Col. 15, lines 19-61), or in short, *accounting setting means does not set said amount of said fee to be imposed on said terminal apparatus when said content ID is placed in said purchase information and said content information corresponding to said content ID stored in said second storage means is accessed by said access control means*. Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the Wiser system by including the technique of setting an amount of a fee in order to remotely access and download information for recording through a data network, to provide an automated billing process for charging customers who download information, and the necessary protections for the downloaded information to avoid unauthorized copying.

Regarding to claim 37, Wiser teaches all the claimed subject matters as discussed in claim 36, and further discloses: *access control means permits access to said content information corresponding to said content ID stored in said second storage means when said content ID is included in said purchase information* (FIG. 8).

Regarding to claim 39, Wiser teaches all the claimed subject matters as discussed in claim 36, Wiser further discloses: *storage control means stores access history information into said second storage means in response to access to said content information by said access control means, and said accounting setting means sets said amount of said tee to be imposed on said terminal apparatus based on said access history information* (Col. 16, line 26-Col. 18, lines 5).

Regarding to claim 40, Wiser teaches all the claimed subject matters as discussed in claim 36, Wiser further discloses: *distribution apparatus includes said storage control means* (FIG. 1B).

Regarding to claim 41, Wiser teaches a secure online music distribution method that provides consumers with flexibility and ease of use in the selection, previewing, downloading, and transporting of audio and other digital media over the Internet, and that provides for security of the media throughout the distribution system. As shown in FIG. 1 is a system for the secure distribution of music and related media over the Internet. The system includes a music distribution center 124 as *a distribution apparatus*,

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which operates with any number of client systems 126 as *a terminal apparatus*. The music distribution center 124 includes a content manager 112, which maintains a media information database 106, a master media file system 120, and a transaction database 130. As shown in FIG. 2, is an illustration of a media data file (Col. 5, lines 43-65). As shown in FIG. 9a-b is the process of purchasing a media data file. By clicking the buy it button, the button generates a URL including the media ID of the song to be purchased. The HTTP server forwards the purchase request to merchant server. Payment information is collected by the merchant server and the media ID is sent to the content manager 112 for verifying the availability status of the request media file (Col. 16, line 26-Col. 17, line 5). The content manager generates a media voucher that includes the media ID (Col. 15, lines 19-23). The content manager updates the transaction database to include a new entry with the data from the voucher (Col. 17, lines 35-37). As seen, the transaction database as a storage means of the distribution apparatus, the verified media ID, or the content ID stored in storage means, is placed in the transaction database as purchase information manage for each terminal apparatus. In short, the technique as discussed indicates the step of *placing a content ID stored in storage means of said distribution apparatus into purchase information managed for each said terminal apparatus and stored in said storage means of said distribution apparatus in response to a request from said terminal apparatus*. The media voucher includes a receipt token, which is returned in the media voucher to the media player for initiating download of the requested media data file from a delivery server (Col. 17, lines 22-31). A receipt token is a strong random number generated by the content manager 112 which is used to create



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a message authentication code (MAC) of the voucher ID and consumer certificate to bind the delivery of the media data to the purchase transaction. Preferably, the MAC is a keyed message authentication code as defined in Internet RFC 2104 (Col. 8, lines 32-41). As seen, the media voucher with a receipt token is access control means for controlling access to the media data file corresponding to media ID stored in storage means in response to a purchasing. In other words, the technique as discussed indicates the step of *controlling access to information corresponding to said content ID stored in said storage means of said distribution apparatus in response to said purchase information; and transmitting said contents information from said distribution apparatus to said terminal apparatus in response to said access*. When a voucher packet is issued for a reservation, it is added to the list of pending purchases, which are not yet authorized for delivery. An electronic wallet is used to provide the payment data by generating a Web page with a "Wallet" button and a "Retrieve It" button. When the user clicks on the wallet button, an invoice indicating the amount of the purchase is returned, and displaying to the user a set of selections of different payment forms available to the user, such as electronic cash, check or specific credit card for selection. The consumer clicks a 'Pay' button to consummate the transaction (Col. 17, line 53-Col. 18, line 5). The authorization token is updated to reflect that the voucher packet has been authorized of purchase and download. This technique illustrates the step of *setting an amount of a fee to be imposed on said terminal apparatus in response to said purchase information*.

Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the Wiser system by including the technique of setting an

amount of a fee in order to remotely access and download information for recording through a data network, to provide an automated billing process for charging customers who download information, and the necessary protections for the downloaded information to avoid unauthorized copying.

Regarding to claim 42, Wiser teaches a secure online music distribution system that provides consumers with flexibility and ease of use in the selection, previewing, downloading, and transporting of audio and other digital media over the Internet, and that provides for security of the media throughout the distribution system. As shown in FIG. 1 is a system for the secure distribution of music and related media over the Internet. The system includes a music distribution center 124 as *a distribution apparatus*, which operates with any number of client systems 126 as *a terminal apparatus*. The music distribution center 124 includes a content manager 112, which maintains a media information database 106, a master media file 120, and a transaction database 130 (Col. 5, lines 43-54) as *storage means for storing a plurality of pieces of content information*. Wiser does not explicitly teach *storage control means for placing a content ID stored in said storage means into purchase information managed for each said terminal apparatus and stored in said storage means in response to a request from said terminal apparatus; access control means for controlling access to said contents information corresponding to said content ID stored in said storage means in response to said purchase information; accounting setting means for setting an amount of a fee to be imposed on said terminal apparatus in response to said purchase information*. However, as shown in FIG.

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9a-b is the process of purchasing a media data file. By clicking the buy it button, the button generates a URL including the media ID of the song to be purchased. The HTTP server forwards the purchase request to merchant server. Payment information is collected by the merchant server and the media ID is sent to the content manager 112 for verifying the availability status of the request media file (Col. 16, line 26-Col. 17, line 5). The content manager generates a media voucher that includes the media ID (Col. 15, lines 19-23). The content manager updates the transaction database to include a new entry with the data from the voucher (Col. 17, lines 35-37). As seen, the transaction database is in the second storage means, the verified media ID, or the content ID stored in second storage means, is placed in the transaction database as purchase information manage for each terminal apparatus. In short, the technique as discussed indicates *storage control means for placing a content ID stored in said storage means into purchase information managed for each said terminal apparatus and stored in said storage means in response to a request from said terminal apparatus.* The media voucher includes a receipt token, which is returned in the media voucher to the media player for initiating download of the requested media data file from a delivery server (Col. 17, lines 22-31). A receipt token is a strong random number generated by the content manager 112 which is used to create a message authentication code (MAC) of the voucher ID and consumer certificate to bind the delivery of the media data to the purchase transaction. Preferably, the MAC is a keyed message authentication code as defined in Internet RFC 2104 (Col. 8, lines 32-41). As seen, the media voucher with a receipt token is access control means for controlling access to the media data file corresponding to media ID stored in

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storage means in response to a purchasing. In other words, the technique as discussed indicates *access control means for controlling access to said contents information corresponding to said content ID stored in said storage means in response to said purchase information*. When a voucher packet is issued for a reservation, it is added to the list of pending purchases, which are not yet authorized for delivery. An electronic wallet is used to provide the payment data by generating a Web page with a "Wallet" button and a "Retrieve It" button. When the user clicks on the wallet button, an invoice indicating the amount of the purchase is returned, and displaying to the user a set of selections of different payment forms available to the user, such as electronic cash, check or specific credit card for selection. The consumer clicks a 'Pay' button to consummate the transaction (Col. 17, line 53-Col. 18, line 5). The authorization token is updated to reflect that the voucher packet has been authorized of purchase and download. This technique illustrates *accounting setting means for setting an amount of a fee to be imposed on said terminal apparatus in response to said purchase information*. Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the Wiser system by including the technique of setting an amount of a fee in order to remotely access and download information for recording through a data network, to provide an automated billing process for charging customers who download information, and the necessary protections for the downloaded information to avoid unauthorized copying.

Regarding to claim 43, Wiser teaches a secure online music distribution system that provides consumers with flexibility and ease of use in the selection, previewing, downloading, and transporting of audio and other digital media over the Internet, and that provides for security of the media throughout the distribution system. As shown in FIG. 1 is a system for the secure distribution of music and related media over the Internet. The system includes a music distribution center 124 as *a server apparatus*, which operates with any number of client systems 126 as *a terminal apparatus*. The client system could be a variety of computer platforms such as Intel Pentium based computers executing Microsoft Corp.'s Windows95 or Windows NT operating systems *as third storage medium for storing a plurality of pieces of content information*. The music distribution center 124 includes a content manager 112, which maintains a media information database 106, a master media file system 120, and a transaction database 130. As shown in FIG. 2, is an illustration of a media data file. The media data files 200 *as a plurality of pieces of content information are stored in* the master media file system 120 as *a first storage medium*, and provided by delivery server 118 as *second storage medium provided in said distribution terminal apparatus for storing said plurality of pieces of content information*. The music distribution system 124 communicates with the various other components such as the client systems 126 over a public communication network, preferably the Internet, using conventional TCP-IP communication protocols for insecure channels, and a secure protocol over TCP, such as Netscape Communication Inc.'s Secure Sockets Layer v. 3 (SSL), for secure communications (Col. 5, line 43-Col. 7, line 16). Wiser does not explicitly teach *a controller for controlling access to any of said*

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*first, said second, and said third storage media based on management information for managing said content information stored in at least two of said first, said second, and said third storage media with a single logical memory map.* However, after the process of registration as shown in FIG. 6 (Col. 13, line 4-Col. 14, line 12), a user is authorized to purchase and preview music from the system. The media data files 200 in the master media file system 120 is displayed for previewing and purchasing with media file names that lead to the location of media content in FIG. 8 as *a single logical memory map*. The technique as discussed indicates *a controller for controlling access to any of said first, said second, and said third storage media based on management information for managing said content information stored in at least two of said first, said second, and said third storage media with a single logical memory map*. Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the Wiser system by including the technique of controlling access with a single logical memory map in order to remotely access and download information for recording through a data network, to provide an automated billing process for charging customers who download information, and the necessary protections for the downloaded information to avoid unauthorized copying.

Regarding to claim 44, Wiser teaches all the claimed subject matters as discussed in claim 43, but fails to disclose: *management information includes first management information for managing said content information stored in said first storage medium and said second storage medium with a single said logical memory map, and second*

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*management information for managing said content information stored said second storage medium and said third storage medium with another said logical memory map.* However, as taught by Wiser, the content manager 112 maintains a list of the delivery servers 118 it operates with, and the number of active streams and total streams for each delivery server 118 as *a single logical memory map*. Each delivery server 118 registers with a content manager 112, providing its network address. The content manager 112 configures each registered delivery server 118 with the number of stream allocated to the delivery server 118, the base UDP port to be used for the streams, and a port number for accepting streaming requests on (Col. 14, line 61-Col. 15, line 9). A user connects to the content manager 112 via a list of media data files as *another single logical memory map* (FIG. 8). Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the Wiser system by using different logical memory map to manage the system with plurality of delivery servers and clients.

Regarding to claim 45, Wiser teaches all the claimed subject matters as discussed in claim 43, Wiser further discloses: *management information includes shared management information for managing said content information stored in said first, said second, and said third storage media with a single said logical memory map* (FIG. 8).

Regarding to claim 46, Wiser teaches all the claimed subject matters as discussed in claim 44, Wiser further discloses: *first management information is stored in*

*said storage means of at least one of said server apparatus and said distribution terminal apparatus, and said second management information is stored in said storage means of at least one of said distribution terminal apparatus and said terminal apparatus* (Col. 6, line 48-Col. 9, line 37).

Regarding to claim 49, Wiser teaches all the claimed subject matters as discussed in claim 43, Wiser further discloses *first storage medium is a hard disk and said third storage medium is a semiconductor memory* (Col. 6, lines 4-15 and Col. 11, lines 39-45).

Regarding to claim 50, Wiser teaches all the claimed subject matters as discussed in claim 43, Wiser further discloses *information is digital audio data* (abstract).

Regarding to claim 51, Wiser teaches all the claimed subject matters as discussed in claim 50, Wiser further discloses *digital audio data is compressed data* (Col. 7, lines 4-16).

**15. Claims 31-33 and 47-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wiser et al. [USP 6,385,596 B1] in view of Parrish et al. [USP 5,117,350].**



Regarding to claim 31, Wiser teaches all the claimed subject matters as discussed in claim 30, but fails to disclose: *control means stores a logical address corresponding to a predetermined physical address of a storage medium provided in said distribution apparatus at which said content information received in response to said user request by said communication means is stored into said storage means*. Parrish teaches a distributed system, and further discloses *control means stores a logical address corresponding to a predetermined physical address of a storage medium provided in said distribution apparatus at which said content information received in response to said user request by said communication means is stored into said storage means* (Parrish, Col. 4, line 50-Col. 5, line 25). Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the Wiser system by including the technique of storing a logical address corresponding to said physical address in order to differentiate downloading data files by their file names.

Regarding to claim 32, Wiser teaches all the claimed subject matters as discussed in claim 31, but fails to disclose: *logical address is included in a piece of management information which is used commonly by said distribution apparatus and said terminal apparatus*. Parrish teaches a distributed system, and further discloses (Parrish, Col. 8, line 58-Col. 9, line 43). Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the Wiser system by including the technique of including a piece of management information in a logical address in order to differentiate downloading data files by their file names.

Regarding to claim 33, Wiser teaches all the claimed subject matters as discussed in claim 32, but fails to disclose: *control means extracts said logical address included in said management information corresponding to content ID in response to said user request, and transmits said logical address to said distribution apparatus*. Parrish teaches a distributed system, and further discloses the technique of using logical and physical address (Parrish, FIG. 3). Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the Wiser system by including the technique of extracting logical address corresponding to content ID in order to differentiate downloading data files by their file names.

Regarding to claim 47, Wiser teaches all the claimed subject matters as discussed in claim 43, but fails to disclose *controller accesses said content information stored at a predetermined physical address of each of said first and said second storage media based on said management information described with a logical address corresponding to said physical address*. Parrish teaches a distributed system, and further discloses *controller accesses said content information stored at a predetermined physical address of each of said first and said second storage media based on said management information described with a logical address corresponding to said physical address* (Parrish, Col. 4, line 50-Col. 5, line 25). Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the Wiser system by including the technique of

accessing based on a logical address corresponding to said physical address in order to differentiate downloading data files by their file names.

Regarding to claim 48, Wiser teaches all the claimed subject matters as discussed in claim 47, Wiser further discloses *a selection section for selecting one or more of said plurality of pieces of content information stored in said first storage medium or said second storage medium in response to a user request to said terminal apparatus* (Wiser, FIG. 8), but fails to teach *controller searches for a logical address of said management information corresponding to said one or more of said plurality of pieces of content information selected by said selection section, converts said logical address into a physical address of said first storage medium or said second storage medium and accesses said first storage medium or said second storage medium based on said physical address*. Parrish teaches a distributed system, and further discloses *controller searches for a logical address of said management information corresponding to said one or more of said plurality of pieces of content information selected by said selection section, converts said logical address into a physical address of said first storage medium or said second storage medium and accesses said first storage medium or said second storage medium based on said physical address* (Parrish, Col. 8, line 58-Col. 9, line 14). Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the Wiser system by including the technique of converting a logical address to physical address in order to differentiate downloading data files by their file names.

**16. Claim 52 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wiser et al. [USP 6,385,596 B1] in view of Inoue [USP 6,567,847 B1].**

Regarding to claim 52, Wiser teaches all the claimed subject matters as discussed in claim 51, but fails to disclose *digital audio data is compressed in an ATRAC format*. Inoue teaches a transmitting and receiving system wherein a data file could be uploaded into a server or download and vice versa and the data is compressed in an ATRAC format (Inoue, Col. 7, line 54-Col. 8, line 6). Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the Wiser system by using ATRAC format when upload and download music in order to remotely access and download information for recording through a data network.

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**Conclusion**

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to HUNG Q PHAM whose telephone number is 703-605-4242. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, KIM Y VU can be reached on 703-305-4393. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

Examiner Hung Pham  
October 28, 2003

  
SHAHID ALAM  
PRIMARY EXAMINER